



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 2
290 BROADWAY
NEW YORK, NY 10007-1866

DEC 18 2007

To All Interested Government Agencies and Public Groups:

In accordance with the U.S. Environmental Protection Agency's (EPA) procedures for the preparation of environmental impact statements (EIS), an environmental review has been performed on the proposed agency action below:

Project Name: Drinking Water Improvements
Southern Onondaga Area Water Districts

Project Number: XP-972642-05

Purpose of Project: The project will eliminate public health threats from drinking water provided by the Mountain Glen Water Company, a substandard water supply company which services 80 residences with water from Ground Water Under the Direct Influence of Surface Water, and from numerous other inadequate wells in the area. The project also includes the installation of fire hydrants which will provide for improved fire protection in the area.

Project Originator: Onondaga County Water Authority

Project Location: Towns of Marcellus, Otisco, and Spafford
Onondaga County, New York

Project Description: The proposed project involves installation of approximately 67,000 linear feet of 4" to 12" diameter water distribution main, and construction of a booster pump station and a 388,000 gallon water storage tank. This new water supply infrastructure will be connected to the Onondaga County Water Authority's water treatment and distribution system.

Estimated Eligible Project Costs: \$874,727

EPA Grant: \$481,100

Our environmental review of this project indicates that no significant adverse environmental impacts will result from the proposed action. Consequently, we have made a decision not to prepare an EIS on the project. This decision is based on a careful review of the project's environmental information document, a site visit, and other supporting information. All of these documents, along with the Environmental Assessment (copy enclosed), are on file at the offices of the EPA Region 2 and of the Towns of Marcellus, Otisco, and Spafford where they are available for public scrutiny upon request. The EA is also available on EPA Region 2's website at <http://www.epa.gov/region02/spmm/r2nepa.htm>.

Comments supporting or disagreeing with this decision may be submitted to EPA for consideration. All comments must be received within 30 calendar days of the date of this finding of no significant impact (FNSI). Please address your comments to: Grace Musumeci, Chief, Environmental Review Section, at the above address. No administrative action will be taken on the project for at least 30 calendar days after the date of this FNSI.

Sincerely,

A handwritten signature in dark ink, appearing to read "Alan J. Steinberg". The signature is fluid and cursive, with the first name "Alan" being particularly prominent.

Alan J. Steinberg
Regional Administrator

Enclosure

Environmental Assessment

I. Project Identification

Name of Project: Drinking Water Improvements
Southern Onondaga Area Water Districts

EPA Project Number: XP-972642-05

Grant Applicant: Onondaga County
1100 Civic Center
Syracuse, New York 13202

Project Location: Towns of Marcellus, Otisco, and Spafford
Onondaga County, New York

II. Background

The Towns of Marcellus, Otisco and Spafford are located in the southwest corner of Onondaga County, New York, approximately 15 miles from the Syracuse metropolitan area. (Figure 1) They are predominantly rural residential communities with open land devoted to agriculture.

The project area consists of those portions of the three Towns which lie adjacent to Otisco Lake on its northern, western, and eastern sides. (Figure 2) Otisco Lake, the smallest and easternmost of the Finger Lakes, is approximately 6 miles in length and $\frac{3}{4}$ mile wide at its widest point. Together with Lake Ontario and Skaneateles Lake, it is one of three primary sources of water utilized by the Onondaga County Water Authority (OCWA) to provide drinking water to 340,000 customers in Onondaga, Oswego, Madison and Oneida Counties. OCWA is permitted to withdraw up to 20 million gallons per day (mgd) from Otisco Lake for water supply purposes. In 2006, the OCWA utilized only 16.76 mgd of its permitted withdrawal from the lake.

OCWA's two drinking water intake pipes are located at the north end of the lake, near its outlet to Nine Mile Creek. After chlorination for disinfection and to mitigate the growth of zebra mussels, the water is conveyed five miles by gravity to the OCWA's Water Treatment Plant in Marcellus for treatment prior to distribution via the OCWA's system of water mains.

The OCWA has implemented a watershed protection and monitoring program to address issues related to runoff to Otisco Lake. The program works in conjunction with state and local health departments to monitor lake condition and identify issues, such as failing septic tanks, which could affect water quality.

III. Purpose and Need for the Project

Currently, most of the residents of the project area obtain water from private wells. Many of these wells are reportedly unable to consistently provide sufficient amounts of satisfactory quality drinking water.

In addition, there is one area (Figure 3), with approximately 80 residences, that is served by the Mountain Glen Water Company (MGWC). There are various issues with the MGWC's water supply system. Of particular note is that the water source of the MGWC has been determined to be "Ground Water Under the Direct Influence of Surface Water" (GWUDI). As a result, to comply with federal and state requirements for public drinking water supply systems, the MGWC must either install a water filtration plant or develop an alternate source of water that complies with the New York State Surface Water Treatment Rule and the New York State Sanitary Code.

Due to widespread problems associated with use of individual wells and with the MGWC's water system, each of the three towns (Marcellus, Otisco, and Spafford), with support from residents and property owners, recently formed water districts for the purpose of ensuring that sufficient quantities of quality potable water are available to residents of this area.

Therefore, the purpose of and need for this project is to provide a reliable source of potable water for the residents of the planning area. An additional goal of the project is to provide fire service to the affected area.

IV. Description of the Proposed Project

The proposed project includes installation of approximately 28,900 linear feet of 12-inch diameter water main pipe, 1,200 linear feet of 10-inch diameter pipe, 32,100 linear feet of 8-inch pipe, and 4,700 linear feet of 4-inch pipe, together with all necessary valves and appurtenances. Fire hydrants would be installed at 600 foot intervals and at the ends of all water mains. In addition, a pump station and 388,000 gallon water storage tank would be constructed to enable the system to meet the area's projected water supply and fire service demands. The proposed facilities, all of which would be constructed in the Towns of Marcellus, Otisco and Spafford, would be connected to a recently-constructed OCWA water main located at the intersection of New York State Route 174 and Coon Hill Road. (Figure 4)

The OCWA, which will operate and maintain the system, has determined that it has sufficient available capacity to meet the water supply needs of these areas.

Service will be provided to each existing developed parcel in the proposed service areas via a curb box and stop at the property line. It will be the responsibility of each property owner to connect his or her property's plumbing to the public water supply, and disconnect it from private wells, as required by the Onondaga County health code.

V. Alternatives

Alternative 1 – Proposed Project – Construction of water mains, pumping station, and water tank, as described in Section IV above.

Alternative 2a and 2b – Upgrading the Mountain Glen Water Company System – Once the system was determined to be a GWUDI, the Onondaga County Health Department presented the company with two alternatives to comply with the Surface Water Treatment Rule. The first option (Alternative 2a) was to construct a new filtration and disinfection facility. The second alternative (Alternative 2b) would require the company to develop a new non-GWUDI water source. The company investigated both alternatives and determined that both alternatives would require considerable land acquisition and labor, such that they would be prohibitively expensive to implement. In addition, neither of these alternatives would address the water supply needs of the remainder of the project area which relies on inadequate wells.

Alternative 3 – Location/Routing Alternatives – Alternative routings of the water lines is somewhat restricted, because all parcels in the water districts must have access to water supply lines along their property boundaries. Thus, wherever feasible to do so without affecting sensitive areas, the water mains will be installed within the shoulders of existing roadways.

Alternative 4 - No Action – Under the no action alternative, no new water lines would be installed. The 80 properties presently served by the MGWC system would be left without a supply of potable water if the MGWC terminates service, as would be required if it does not install a water filtration plant or develop an alternate source of water that complies with the New York State Surface Water Treatment Rule and the New York State Sanitary Code. This could result in potential property abandonment, or possibly substandard and uncoordinated individual efforts to obtain alternative water supplies. Furthermore, this alternative does not meet the purpose of the project or the goal of providing fire service to the project area. Without the project, individual property owners will be forced to choose between replacing failing wells, constructing water lines from another municipality, or continuing to live with substandard drinking water quality/quantity problems. Consequently, the no action alternative was rejected.

VI. Environmental Consequences

- A. Land Use - In a May 16, 2006 letter concerning its review of the project, the New York State Department of Agriculture and Markets determined that the project would not have an unreasonable adverse effect on the continued viability of farm enterprises within an agricultural district. Thus, land use in areas zoned agricultural should not significantly change, although some vacant properties may become developed with additional residences in the future, once a public water supply is available. Any potentially significant changes in land use that could result from the availability of public water will be controlled by zoning regulations.
- B. Wetlands/Surface Water Quality Issues - Stormwater runoff from construction operations that result in soil disturbance of one acre or greater, must be covered by a State Pollutant Discharge Elimination System (SPDES) Permit for Stormwater Discharges from Construction Activities issued by the New York State Department of Environmental Conservation (NYSDEC). Construction of the waterline will occur in highway rights-of-way and will not significantly affect any wetlands. Siltation controls will be provided along the construction areas to prevent any potential silt migration to wetland areas. In addition, the water main will be installed across Nine Mile Creek utilizing the directional drilling method, which will avoid any wetland impacts. Open-cut crossings of three small streams in the Town of Otisco will be accomplished in accordance with an Article 14 Protection of Waters permit issued by the U.S. Army Corps of Engineers. Consequently, the project will have no significant wetland or surface water quality impacts.
- C. Groundwater - The decommissioning of a large number of private wells which presently serve properties surrounding Otisco Lake will occur once the project is placed into operation, thus increasing the amount of groundwater which reaches the lake.
- D. Air Quality - Because the project is funded with a federal grant, it is subject to the general conformity air regulations (40 CFR 93 Subpart B). The proposed project is located in the Onondaga County carbon monoxide (CO) air quality maintenance area. Accordingly, EPA conducted an analysis of CO pollutant emissions from construction of the project. Emissions estimates were based on emission factors taken from a number of sources and on vehicle/equipment types and activity levels supplied by the project sponsor.

Tables 1 and 2 below show the results of the general conformity applicability analysis for 2008 and 2009, respectively. As indicated, emissions of CO from construction of

the project are significantly less than the applicable general conformity "deminimis" threshold value. Therefore, the project is presumed to conform with the State Implementation Plan.

Table 1

2008 Construction Emissions Summary for Carbon Monoxide	CO
OFF-ROAD CONSTRUCTION EMISSIONS (tons/yr)	0.831
ON-ROAD CONSTRUCTION EMISSIONS (tons/yr)	0.510
TOTAL CONSTRUCTION EMISSIONS (tons/yr)	1.34
GENERAL CONFORMITY THRESHOLD (tons/yr)	100
EMISSIONS AS A PERCENTAGE OF THRESHOLD	1.34%

Table 2

2009 Construction Emissions Summary for Carbon Monoxide	CO
OFF-ROAD CONSTRUCTION EMISSIONS (tons/yr)	0.029
ON-ROAD CONSTRUCTION EMISSIONS (tons/yr)	0.181
TOTAL CONSTRUCTION EMISSIONS (tons/yr)	0.210
GENERAL CONFORMITY THRESHOLD (tons/yr)	100
EMISSIONS AS A PERCENTAGE OF THRESHOLD	0.21%

Short-term construction-related impacts to air quality in the project area include fugitive dust emissions and emissions from construction equipment. Mitigation techniques include but are not limited to:

- Wetting or chemically treating exposed earth during construction.
- Limiting construction activities during extremely windy and/or dry conditions.
- Covering dust-producing materials being transported to and from the area.
- Keeping trucks and other construction equipment clean and properly maintained
- Implementing a traffic management plan to minimize delays, and routing traffic away from residential areas and other sensitive receptors.

- E. Flood Plains - The project will not exert significant physical impacts on the floodplain; excavation will not be extensive and the ground surface will be restored within a short time. Flood elevations will not change.
- F. Transportation – Standard maintenance and protection traffic measures will be implemented to reduce traffic disturbances during construction, but some minor short-term delays are likely in areas where the water main needs to be installed within the roadway pavement. There will, however, not be any permanent or long-term transportation impacts.
- G. Noise - Noise generated by construction equipment may temporarily impact residents as construction proceeds through their areas. Local noise ordinances will be followed.
- H. Endangered/Threatened Species – The U.S. Fish and Wildlife Service and New York State Department of Environmental Conservation were consulted about the project. In a letter dated, August 14, 2003, the FWS states that no known federally listed endangered/threatened species or their habitat are present in the area. The NYSDEC's August 21, 2003 response letter contained similar findings.
- I. Cultural Resources - The New York State Office of Parks, Recreation and Historic Preservation has reviewed the Stage 1A and Stage 1B cultural resources investigations for the project. The State Historic Preservation Officer's July 27, 2007 letter indicated that the project will have No Adverse Effect on historic properties in or eligible for listing in the State and National Registers of Historic Places, provided that a number of areas identified in the Stage 1B cultural resources investigation are avoided during construction. EPA concurs with this conclusion.
- J. Socio-Economic/Environmental Justice Issues -The EPA Region 2 Environmental Justice (EJ) analysis methodology supports *EPA Region 2's Interim Policy for Environmental Justice* (IP). A specific community that is under evaluation for inclusion in the Region's EJ program is referred to as the Community of Concern (COC). The evaluation process hinges on the comparison of the respective levels of the environmental burden, minority representation, and low-income representation between the COC and its statistical reference area.

Demographic Analysis – EPA's demographic analysis utilizes a Geographic Information System (GIS) to estimate the percent minority and percent poverty for the community of concern and compares them to appropriate statistical references. Analysis of the project area indicates that minorities compose less than 2 percent of the population of the local community (compared to 34.73%, the percentage that EPA uses to determine minority areas in rural areas of New York State), and that less than 4 percent of the population has income that is below the poverty level (compared to 23.59 percent, the percentage that EPA uses to identify low income rural areas in New York State). Accordingly, the area does not meet the EPA criteria for being classified an Environmental Justice area.

<u>Demographic Indicators</u>	<u>NY State Thresholds</u>	<u>COC Indicator</u>
Percent Minority:	34.73	1.94
Percent Poverty:	23.59	3.65

Environmental Burden - The community's existing environmental burden was similarly estimated by EPA through the use of GIS analysis. EPA uses GIS analysis and the concept of an Environmental Load Profile to compare communities' present environmental load to statewide-derived thresholds. To accomplish this, EPA uses the following three indicators: Toxic Release Inventory, Facility Density, and Air Toxics. None of the indicators exceed their corresponding New York State Threshold values for average environmental burden:

<u>Environmental Load Indicators</u>	<u>NY State Threshold</u>	<u>COC Indicator</u>
TRI Indicator:	5.67	3.59
Facility Density Indicator:	56	1.57
Air Toxics Cancer Indicator:	63.55	28.22
Air Toxics Non-cancer Indicator:	11.3	2.54

Summary - The COC does not bear a disproportionate environmental load and is below the New York State demographic thresholds for defining Environmental Justice areas.

VII. Coordination of Environmental Review

Public Participation – The formation of the three Towns' water districts was subject to New York State Town Law, which requires public participation. The public was presented with a "Map, Plan and Report" for each of the three proposed districts and input was solicited. In 2005, public hearings were held for each District. In addition, on December 27, 2006, the three Towns published their environmental review findings in the New York State Environmental Review Bulletin. The Towns held public hearings on the matter as follows: Town of Marcellus, Sept 12, 2005 and December 12, 2005; Town of Otisco on Nov. 25, 2005 and July 17, 2006; Town of Spafford on Sept. 21, 2005, Dec 14, 2005, March 27, 2006 and July 20, 2006.

Indian Nations and Federal, State and Local Agencies Notified/Consulted

- Onondaga Nation of Indians
- Haudenosaunee Environmental Task Force
- U.S. Department of the Interior – Fish and Wildlife Service
- New York State Department of Environmental Conservation, Division of Fish, Wildlife and Marine Resources, Natural Heritage Program
- New York State Office of Parks, Recreation and Historic Preservation
- New York State Department of Agriculture and Markets
- New York State Department of Transportation

- New York State Department of Transportation
- Onondaga County Planning Department
- Onondaga County Health Department

VIII. Reference Documents

- A. *Environmental Information Document, Southern Onondaga Water Districts, Towns of Marcellus, Otisco and Spafford*, Barton and Loguidice, June 2007
- B. *Final Notice to Undertake an Action Within an Agricultural District (Towns of Marcellus, Otisco, and Spafford)*, Barton and Loguidice, February 2006
- C. *2006 Annual Water Quality and Water Supply Statement to the Authority's Customer and Consumers*, Onondaga County Water Authority, May 2007
- D. *Letter Response to EPA's Nov. 2 and 6, 2007 Comments on Southern Onondaga Water Districts*, Michelle I. Burt, Barton & Loguidice, November 9, 2007
- E. *Phase 1B Archeological Reconnaissance Survey, Southern Onondaga Water District Project*, Andrea Zlotucha Kozub, Public Archeological Facility, Binghamton University, March 5, 2007

Towns of Marcellus, Otisco, and Spafford Onondaga County, New York

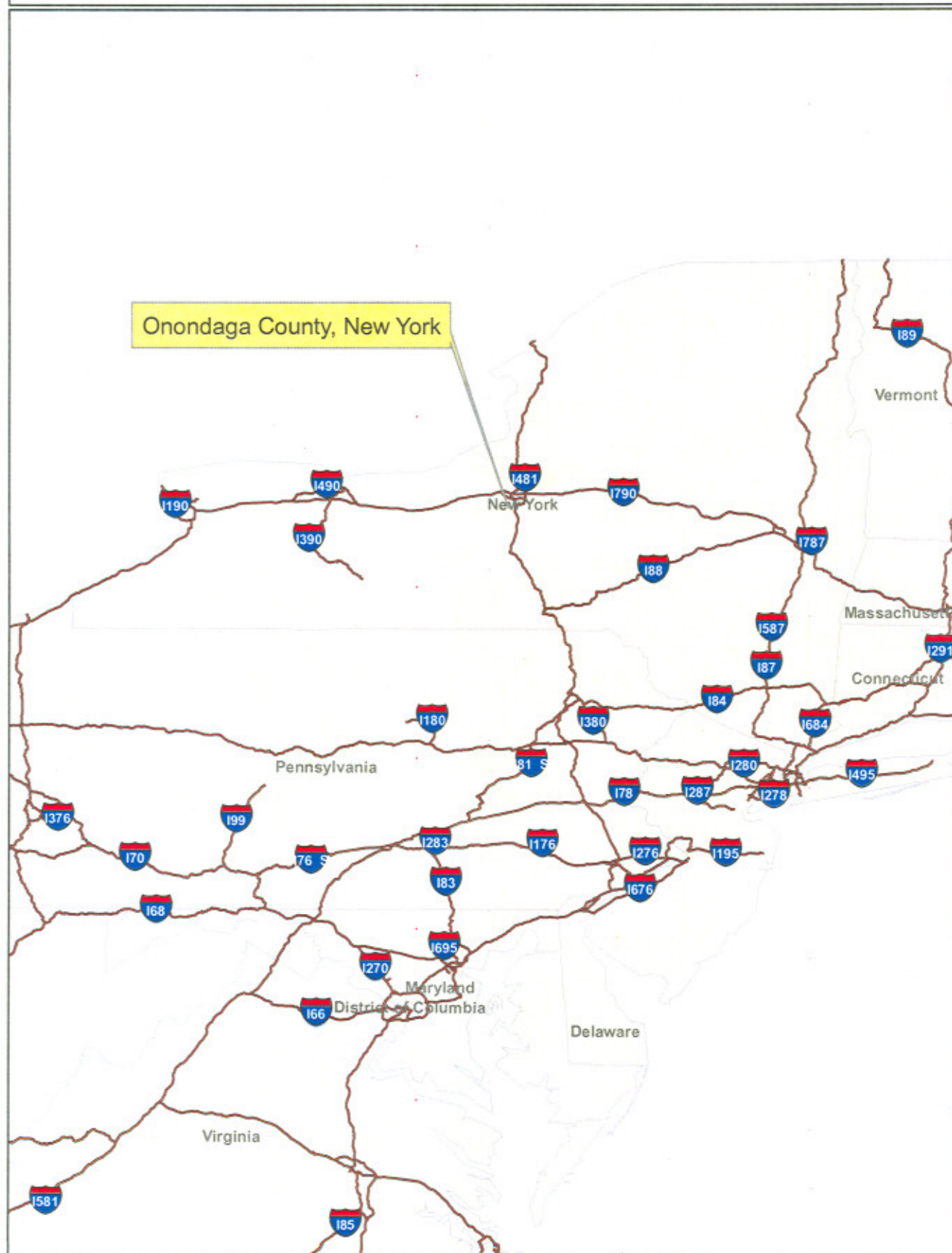
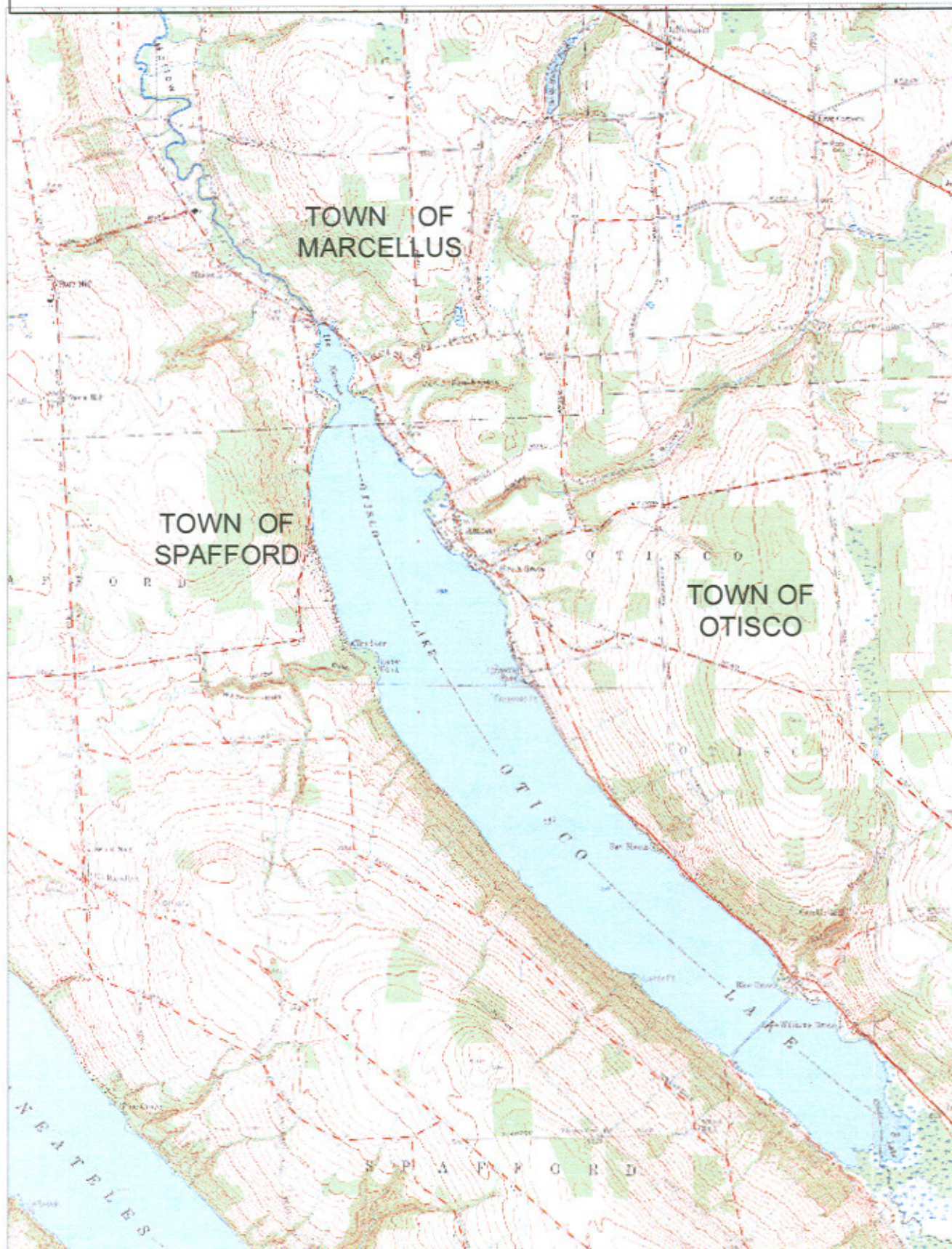
Miles
100

FIGURE 1

Towns of Marcellus, Otisco, and Spafford Onondaga County, New York



Miles
0.4

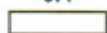


FIGURE 2

**Towns of Marcellus, Otisco, and Spafford
Onondaga County, New York**



0 0.1 0.2 0.4 0.6 0.8
Miles

FIGURE 3

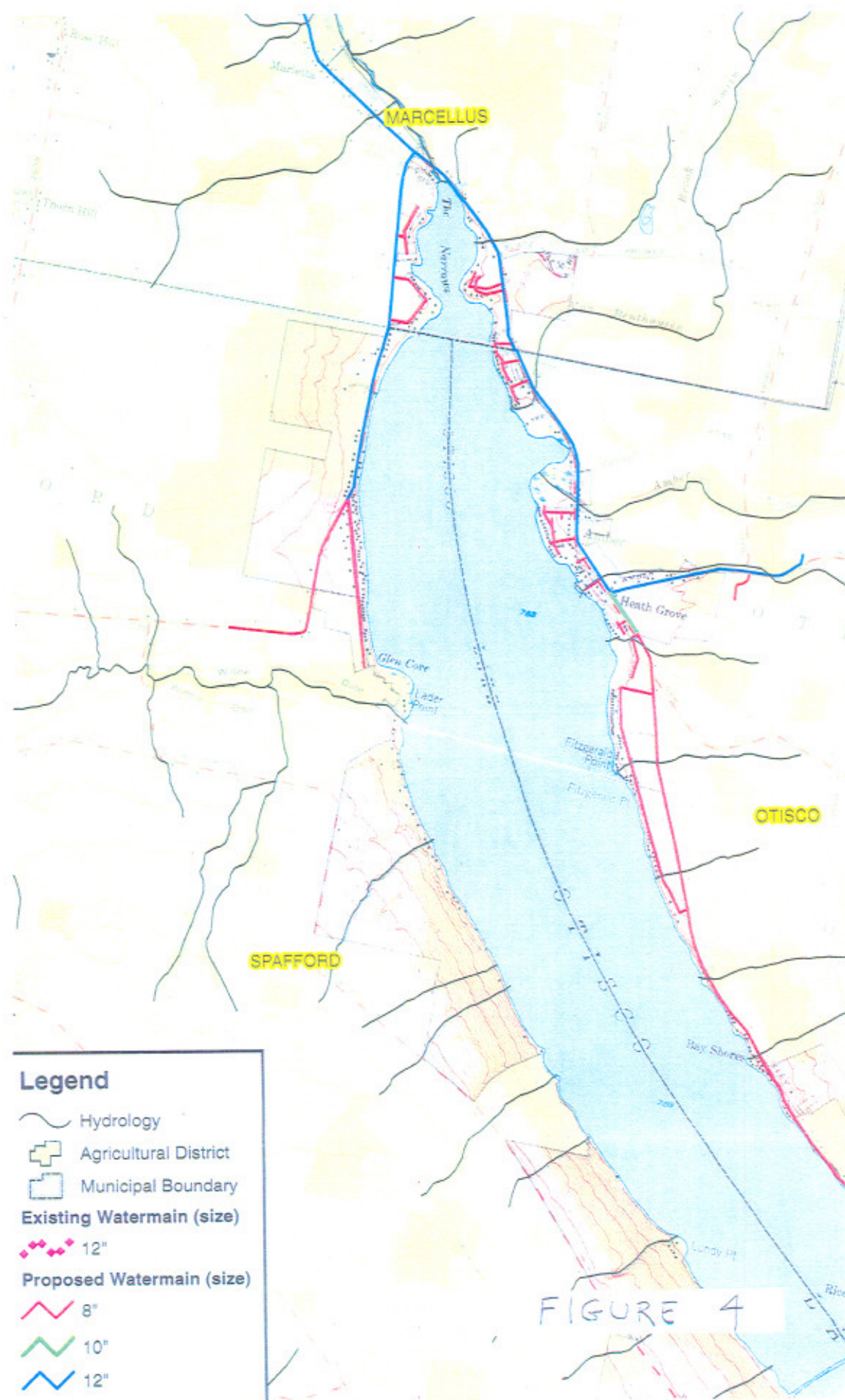


FIGURE 4